IN THE CLAIMS:

1-6. (Canceled).

7. (New) A method of determining the position of a pick-up head relative to a disk, comprising:

a. dividing the disk into a plurality of sections;

b. reading frame sync signals from the disk;

c. generating an averaged frame sync signal from rotation of the disk;

d. based on the averaged frame sync signal, determining which section the pick-up head is located in;

e. changing the position of the pick-up head; and

f. repeating steps (d) and (e) until the pick-up head is in the correct section.

8. (New) The method of claim 7, wherein the averaged frame sync signal is the number of frame sync signals (FRAMESYNC) per frequency of disk rotation (FODR).

9. (New) The method of claim 7, further including:

providing each section with an upper limit and a lower limit.

10. (New) The method of claim 9, wherein step (d) further includes:

comparing the averaged frame sync signal with the upper and lower limits to determine which section the pick-up signal is located in.

11. (New) The method of claim 7, wherein step (c) further includes:

determining a rotation frequency of the disk based on the moving speed of the pick-up head and the distance between the pick-up head and the center of the disk.

12. (New) The method of claim 7, further including:

generating a pick-up head ready signal indicating that the pick-up head is in a steady state, based on a frequency variation signal, a track on success signal and the rotation frequency of the disk.

13. (New) The method of claim 12, wherein the pick-up head ready signal is enabled when the frequency variation signal is de-asserted and the track on success signal is asserted.

14. (New) A device for determining the position of a pick-up head relative to a disk which is divided into a plurality of sections, comprising:

a position detector for receiving a frequency variation (FA), a track on success signal (TOS) and a frequency of disk rotation signal (FODR), and outputting a pick-up head ready signal (PUHRDY);

a position condition detecting unit for receiving a frame synchronous signal (FRAMESYNC) and a frequency of disk rotation signal (FODR), and outputting an optic pick-up head position signal, the position condition detecting unit including:

a counting unit that receives the FRAMESYNC signal and the FODR signal and outputting a FRAMESYNC per FODR;

a position counting unit that receives a feedback optic pick-up head position signal and outputs an upper limit and a lower limit for the current section;

a comparing unit that receives the FRAMESYNC per FODR, the upper limit, and the lower limit of the current section, and outputs the optic pick-up head position signal.